Michigan Department Of Transportation 5100B (03/10)

# CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

MDOT PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION				
MDOT PROJECT MANAGER: Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL			CONSULTANT: Provide only ch	necked items below in proposal
Check the	appropriate Tier in the	box below		
TIER 1 (\$25,000-\$99,999)	TIER II (\$100,000- \$250,000)	TIER III (>\$250,000)		
			Understanding of Service	
			Innovations	
			Safety Program	
N/A			Organizational Chart	
			Qualifications of Team	
			Past Performance	
Not required As part of Official RFP	Not required As part of Official RFP		Quality Assurance/Quality	Control
			will be used for all selection site inspection or survey ac	of work performed in Michigan ns unless the project is for on- ctivities, then location should ce from the consultant office to irvey activity.
N/A	N/A		Presentation	
N/A	N/A		Technical Proposal (if Pres	sentation is required)
3 pages (MDOT Forms not counted) (No Resumes)	7 pages (MDOT Forms not counted)	19 pages (MDOT Forms not counted)	Total maximum pages for F personnel resumes	RFP not including key

# REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.

RFP SPECIFIC INFORMATION				
BUREAU OF HIGHWAYS BUREAU OF T		BUREAU OF TRA	NSPORTATION PLANNING **	OTHER
THE SERVICE WAS PO	OSTED ON THE A	NTICIPATED QUARTERLY R	EQUESTS FOR PROPOSALS	
NO	YES	DATED	THROUGH	
		page of the attach Prequalification Classific	a- sure that current financial inf computations, and financia is on file with MDOT's Offition must be on file for the partner the contract will not be delated.	vices - If selected, the vendor must make formation, including labor rates, overhead all statements, if overhead is not audited, ice of Commission Audits. This information vendor and all sub vendors so that ayed. Form 5100J is required with Prontly prequalified with MDOT

Qualifications Based Selection – Use Consultant/Vendor Selection Guidelines

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

\*\*For RFP's that originate in Bureau of Transportation Planning only, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "PRICE PROPOSAL." The vendor's name and return address MUST be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

**Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

**Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

Low Bid (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

#### **BID SHEET INSTRUCTIONS**

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "SEALED BID." The vendor's name and return address MUST be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

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#### PROPOSAL SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE

#### PROPOSAL AND BID SHEET MAILING ADDRESSES

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

MDOT Project Manager MDOT Other

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

Lansing Regular Mail	OR	Lansing Overnight Mail
Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

#### **GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

#### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D - Request for Proposal Cover Sheet

5100J – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

(These forms are not included in the proposal maximum page count.)

# **Michigan Department of Transportation**

# SCOPE OF SERVICE FOR DESIGN SERVICES

**CONTROL SECTION(S):** 50011

**JOB NUMBER(S):** 111363

# **PROJECT LOCATION:**

The project is located on M-53 (Van Dyke) from Helen Street (1/2 way between 10 Mile and 11 Mile Rds) to the Red Run Drain (just north of Chicago Road) in the Cities of Warren and Centerline.

The project length is 2.84 miles.

# **PROJECT DESCRIPTION:**

Mill and HMA resurface curb and gutter replacement, signal replacement, ADA ramp improvements, drainage improvements, sign replacement.

**ANTICIPATED SERVICE START DATE:** March 2012

**ANTICIPATED SERVICE COMPLETION DATE:** March 2014

# PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Roadway Rehabilitation & Rural Freeways

# **SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Road Design Surveys
Right-of-Way Surveys
Maintaining Traffic Plans & Provisions
Pavement Marking Plans
Perm. Non-Freeway Traffic Signing Plans
Traffic Signal Design
Safety Studies
Simple Traffic Signal Operations

**DBE REQUIREMENT**: 7%

# **MDOT PROJECT ENGINEER MANAGER:**

Steven Minton, Cost & Scheduling Engineer Macomb TSC 38257 Mound Road Sterling Heights, MI 48310 586-978-1935 586-978-8075 fax mintons@michigan.gov

# **CONSTRUCTION COST:**

A. The estimated cost of construction is:

# CONSTRUCTION TOTAL \$11,983,000

B. The estimated cost of real estate is: \$0

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.

# **REQUIRED MDOT GUIDELINES AND STANDARDS:**

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

NOTE: A process change mandated by federal audit of MDOT's design process puts the Omissions and Errors Check Meeting <u>after</u> the Plan Completion. Please keep this in mind when preparing your schedule. See MDOT Road Design Manual, Chapter 14 – Procedures – Section 14.54 for corroboration. See "For Your Information" contacts at the end of this document for more info or questions.

Consultant is required to use MDOT's current version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. Consultant shall comply with all MDOT CADD standards and file naming conventions.

#### **CONSULTANT RESPONSIBILITIES:**

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Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. Perform design surveys.
- B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.
- C. Compute and verify all plan quantities.
- D. Prepare staging plans and special provisions for maintaining traffic during construction.
- E. Provide solutions to any unique problems that may arise during the design of this project.
- F. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.
- G. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- H. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Preliminary Project Assessment (PPA).
- I. The Consultant shall be required to prepare and submit a CPM network for the construction of this project.

- J. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.
- K. The Consultant will provide to MDOT at the scheduled submittal dates, copies of the required specifications and plan set materials for distribution by MDOT for all reviews for this project with the exception of The Plan Review. The Consultant shall contact the project manager prior to the submittal dates for the exact number of copies that will be required for submittal.
- L. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.
- M. Attend any project-related meetings as directed by the MDOT Project Manager.
- N. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.
- O. The Consultant shall assist in the review of utility permit requests, incorporate the information in the design plans, and respond within 2 weeks from receipt of the permit.
- P. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- Q. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

### **UTILITIES**

The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed

by the MDOT Utility Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project. The Consultant will be responsible for miscellaneous staking of utilities.

# TRAFFIC CONTROL

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.

#### **MDOT PERMITS**

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

#### MONTHLY PROGRESS REPORT

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager.

#### **MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  - 1. Project related meetings.
  - 2. The Plan Review
  - 3. Utility Meetings.
  - 4. Quantity summary sheets and final item cost estimates.
  - 5. Packaging of plans and proposal.
- B. Furnish Special Details and pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.
- D. Obtain all permits for the project as outlined in previous section.
- E. Coordinate any necessary utility relocation.
- F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

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#### **DELIVERABLES:**

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, etc.) on DVD, CD or uploaded to ProjectWise, as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names as shown in Appendix A of the Road Design Manual. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns\*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted in their native format with standard naming conventions as well as combined into one Adobe PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capturing a legally signed document or a hard copy version of a document is all that exists.

Plan files shall be submitted in their native dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF with full text search and level on/off capabilities in half size (11" x 17") formats. A full size title sheet shall be plotted stamped and signed then scanned for inclusion with the Adobe PDF set. The original title sheet will be sent to the MDOT Project Manager.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the txt and csv files necessary for import into the Trns\*port bid letting software. The SAPW files shall be transmitted electronically by the method specified by the MDOT Project Manager.

The project construction, removal and profile sheets will require a ratio (scale) of **1:40** (English Units).

Other plan sheets that are required for this project shall be completed by the Consultant. These include, but are not limited to the following plan sheets:

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Note Sheet.
- C. Typical Cross-Sections.

- D. Project specific Special Details.
- E. Construction staging and traffic control plans.
- F. Detail grade sheets for critical areas.
- G. Pavement marking plan(s).
- H. Witness and benchmark sheet(s).
- I. Soil boring log sheet(s).
- J. Structure plan(s).

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

## PROJECT SCHEDULE:

Authorization (approx.) March 2012

 Plan Completion:
 4/4/13

 OEC Meeting:
 4/25/13

 Consultant Plan Turn In:
 5/24/13

 Letting:
 10/4/13

 Final Deliverables
 11/8/13

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

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MDOT Preconstruction Tasks Consultant Checklist P/PMS Form Only

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Version 6

Updated 05/18/2011

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the <a href="P/PMS Task Manual">P/PMS Task Manual</a> for more details. Scheduling assistance may be accomplished with estimated completion dates. While not part of P/PMS, an Authorization Milestone and Post-Design Tasks have been included for your reference.

		P/PMS TASK NUMBER AND DESCRIPTION		
VEC	NO	CONCULTANT CONTRACT AUTHORIZATION/EVECUTION		
YES	NO	CONSULTANT CONTRACT AUTHORIZATION/EXECUTION		
		EPE SCOPING ANALYSIS		
	Х	2100 Scope Verification and Initiation of EPE Activities		
		·		
	X	210M Program & Project Review Board Concurrance		
	X	2115 Traffic Data Collection		
	X	2120 Prepare Traffic Analysis Report		
	X	2125 Traffic Capacity Analysis		
	X	2130 Prepare Project Justification		
	X	213M Concurrence by Regulatory Agencies with the Purpose and Need		
	Х	2140 Develop and Review Illustrative Alternatives		
X		2155 Request/Perform Safety Analysis		
	Х	2160 Prepare and Review EIS Scoping Document		
	Х	211M Public Information Meeting		
		EPE DRAFT ANALYSIS		
	Х	2310 Conduct Technical SEE Studies		
	X	2311 Cultural Resources Survey		
	Х	2312 Recreational Survey – Section 4(f)/6(f)		
	Х	2313 Endangered Species Survey		
	Х	2314 Wetland Assessment		
	Х	2315 Wetland Mitigation		
	Х	2316 Other Technical Reports		
	Х	2321 Prepare for Aerial Photography		
	Х	2322 Finish/Print Aerial Photography		
	Х	2330 Collect EPE Geotechnical Data		
	Х	2340 Develop and Review Practical Alternatives		
	Х	233M Aerial Photography Flight		
	Х	2360 Prepare and Review EA		
	Х	231M Approval of EA by FHWA		
	Х	2370 Prepare and Review Draft EIS		
	Х	237M Approval of Draft EIS by FHWA		
	Х	2380 Distribute EA		

YES	NO	CONSULTANT CONTRACT AUTHORIZATION/EXECUTION	
	X	232M Public Hearing for EA	
	X	2390 Distribute DEIS	
	X	239M Public Hearing for DEIS	
	X	2510 Determine and Review Recommended Alternative	
	X		
	X		
	X	2525 Prepare and Review Engineering Report 2530 Prepare and Review Request for FONSI	
	X	·	
	X		
		2540 Prepare and Review FEIS	
	X	254M Approval of FEIS by FHWA	
	X	2550 Obtain ROD	
	X	255M ROD Issued by FHWA	
	Х	2570 ITS Concept of Operations	
		CONTAMINATION INVESTIGATION	
	X	2810 Project Area Contamination Survey (PCS)	
	X	2820 Preliminary Site Investigation (PSI) for Contamination	
		2020 Freiminary Site investigation (FSI) for Contamination	
		DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION	
	Х	3130 Verify Design Scope of Work and Cost	
	Х	3310 Prepare Aerial Topographic Mapping	
	Х	3320 Conduct Photogrammetric Control Survey	
	Х	3321 Set Aerial Photo Targets	
Х		3330 Conduct Design Survey	
	Х	3340 Conduct Structure Survey	
	Х	3350 Conduct Hydraulics Survey	
Χ		3360 Prepare Base Plans	
	Х	311M Utility Notification	
	Х	3361 Review and Submit Preliminary ROW Plans	
	Х	331M Preliminary ROW Plans Distributed	
	Х	3365 Pre-Conceptual ITS Design and Meeting	
	Х	3370 Prepare Structure Study	
	Х	3375 Conduct Value Engineering Study	
	Х	3380 Review Base Plans	
	Х	332M Base Plan Review (Pre-GI Inspection)	
Х		3390 Develop the Maintaining Traffic Concepts	
		PRELIMINARY PLANS PREPARATION	
	Х	3510 Perform Roadway Geotechnical Investigation	
	Х	3520 Conduct Hydraulic/Hydrologic and Scour Analysis	
	Х	3522 Conduct Drainage Study, Storm Sewer Design	

YES	NO	CONSULTANT CONTRACT AUTHORIZATION/EXECUTION	
	X	3530 Conduct Structure Foundation Investigation	
	X	3535 Conduct Structure Review for Architectural and Aesthetic Improvements	
X		3540 Develop the Maintaining Traffic Plan	
X		3551 Prepare/Review Preliminary Traffic Signal Design Plan	
X		3552 Develop Preliminary Pavement Marking Plan	
X		3553 Develop Preliminary Non-Freeway Signing Plan	
	Х	3554 Develop Preliminary Freeway Signing Plan	
X		3555 Prepare/Review Preliminary Traffic Signal Operations	
	Х	3570 Prepare Preliminary Structure Plans	
X		3580 Develop Preliminary Plans	
	X	3581 Review and Submit Final ROW Plans	
	Х	351M Final ROW Plans Distributed	
	Х	3585 Final ITS Concept Design and Meeting	
	Х	3590 Review Preliminary Plans (Hold Plan Review Meeting)	
	X	352M THE Plan Review (Grade Inspection)	
	X	3595 Conduct ITS Structure Foundation Investigation	
		<u>UTILITIES</u>	
X		3610 Compile Utility Information	
	Х	3615 Compile ITS Utility Information	
	Х	3650 Coordinate RR Involvement for Grade Separations	
	Х	3655 Coordinate RR Involvement for At-Grade Crossings	
	Х	3660 Resolve Utility Issues	
	Х	360M Utility Conflict Resolution Plan Distribution	
	Х	361M Utility Meeting	
	Х	3670 Develop Municipal Utility Plans	
	Х	3672 Develop Special Drainage Structures Plans	
	Х	3675 Develop Electrical Plans	
	Х	3680 Preliminary ITS Communication Analysis	
	Х	3690 Power Design (Power Drop in Field)	
		MITIGATION/PERMITS	
	Х	3710 Develop Required Mitigation	
	Х	3720 Assemble Environmental Permit Applications	
	Х	3730 Obtain Environmental Permit	
		FINAL PLAN PREPARATION	
X		3821 Prepare/Review Final Traffic Signal Design Plan	
X		3822 Complete Permanent Pavement Marking Plan	
X		3823 Complete Non-Freeway Signing Plan	

YES	NO	CONSULTANT CONTRACT AUTHORIZATION/EXECUTION	
	Х	3824 Complete Freeway Signing Plan	
X		3825 Prepare/Review Final Traffic Signal Operations	
X		3830 Complete the Maintaining Traffic Plan	
X		3840 Develop Final Plans and Specifications	
	Х	380M Plan Completion	
	Х	3850 Develop Structure Final Plans and Specifications	
	Х	3870 Hold Omissions/Errors Check (OEC) Meeting	
	Х	387M Omissions/Errors Checks Meeting	
	Х	389M Plan Turn-In	
	Х	3880 CPM Quality Assurance Review	
	Х	3890 Final ITS Communication Analysis	
		EARLY RIGHT OF WAY WORK	
	Х	4120 Obtain Preliminary Title Commitments	
	X	4130 Prepare Marked Final Right Of Way Plans	
	X	413M Approved Marked Final ROW	
	X	4140 Prepare Property Legal Instruments	
		ROW ACQUISITION	
	Х	4411 Preliminary Interviews	
	Х	441M Post-Decision Meeting	
	Х	4412 Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization	
	Х	4413 Appraisal Reports	
	Х	4420 Appraisal Review Reports	
	Х	4430 Acquire Right Of Way Parcels	
	X	4510 Conduct Right Of Way Survey & Staking	
		ROW RELOCATION	
	Х	4710 Relocation Assistance	
	X 4720 Prepare Improvement Removal Plan		
	X	442M ROW Certification	
	X	4810 Complete Acquisition Process	
	X	4820 Manage Excess Real Estate	
	Х	4830 Provide Post-Certification Relocation Assistance	
	Х	4910 Conduct ROW Monumentation	
	Х	5010 Construction Phase Engineering and Assistance	
	Х	5020 Prepare As-Built Drawings	

# **FOR YOUR INFORMATION**

For questions on specific tasks, refer to the P/PMS Task Manual located on the MDOT Bulletin Board System.

For assistance in accessing this manual, please contact one of following:

Dennis Kelley: (517) 373-4614

# PAYMENT SCHEDULE

# **CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior <u>written</u> approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent <u>on this project</u> in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

ATTACHMENT A

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## April 2011

# **SURVEY SCOPE OF WORK**

Survey Limits: As needed for Design, Right of Way, and Construction. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

#### **NOTES**:

The Selected Consultant shall discuss the scope of this survey with an MDOT Region Surveyor or an MDOT Lansing Design Surveyor before submitting a priced proposal.

The Selected Consultant surveyor must contact the Region or TSC Traffic and Safety Engineer for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan <u>must</u>** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as traversing, leveling, mapping, etc., <u>must</u> be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

#### **GENERAL REQUIREMENTS:**

- 1. Surveys must comply with **all Michigan law** relative to land surveying.
- 2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan, according to Public Act 299 of 1980.
- 3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, Photogrammetric Ground Control, and/or Geodetic Control must be completed by a survey firm which is pre-qualified by MDOT for that category.
- 4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2009. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.
- 5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities
  - Coordination and Permits Section.
- 6. Prior to performing the survey, the Consultant must contact all landowners upon whose

lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).

- 7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.
- 8. The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
- 9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.
- 10. Measurements, stationing, recorded data, and computations must be in **International Feet**, unless specified otherwise by the MDOT Project Manager.
- 11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83 (NSRS2007). All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan.
- 12. The survey notes must be submitted to the Design Survey Unit in 10" by 12" divided portfolios with flap covers. As many portfolios should be used as are needed to contain all of the required documents and Compact Discs (CD's) or DVD's. Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor". It is desirable to limit paper documents as much as possible.
- 13. Each portfolio and CD must be labeled on the outside as in the following example: Survey Notes for:

  Route, Location and Project Limits [I-94 under Beaubien Street ]

  Control Section [S06 of 82024] Job Number [45197D] Date [ of submittal ]

  By [ Name of Firm ]

  Michigan Professional Surveyor [ ] License # [ ]
- 14. Each submittal is to be divided into six sections. These sections are to be labeled as follows: **Administrative**, **Alignment**, **Control**, **Property**, **Mapping**, and **Miscellaneous**.
- 15. To be included in the Administrative section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, available from the MDOT Design Survey Unit. This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. It is highly recommended that the consultant become familiar with this document prior to preparing the proposal and again prior to assembling the final

portfolio. Failure to use and include this document may result in the immediate return of the project portfolio for completion.

- 16. All data, whether electronic or paper, must be recorded on non-rewritable Compact Discs (CD's) or DVD's. All paper files, including MicroStation files, must be scanned and/or converted to Adobe Acrobat .PDF format. It is not necessary to include raw survey data files in the Adobe file. CD's must be organized in the same manner as the portfolio, such as by Administrative section, Control section, etc. A Table of Contents in Adobe Acrobat format is required that has all .PDF pages of the CD bookmarked/linked so each place in the .PDF archive can be accessed with a single click of the computer mouse. Specified format files such as Microsoft Word, CAiCE and MicroStation must have separate access in native format outside of the .PDF file.
- 17. It is not necessary to label each individual paper page in the portfolio.
- 18. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor.

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be sent to** the MDOT, Design Division, Supervising Land Surveyor, P.O. Box 30050, Lansing, MI 48909. Please use MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must also be sent to the MDOT Project Manager for Design.

Acceptance of this survey by the MDOT Supervising Land Surveyor and/or the MDOT Project Manager does not relieve the Consultant of any liability for the content of the survey.

#### WORK RESTRICTIONS

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT Traffic and Safety Engineer at the closest MDOT TSC prior to submitting a priced proposal.

No work shall be performed or lane closures allowed during the Memorial Day, July 4<sup>th</sup>, or Labor Day holiday periods, as defined by the MDOT Project Manager or representative specifically designated by the Project Manager (the Traffic & Safety Engineer at the MDOT TSC).

Work on weekends, if approved, shall be as directed by the MDOT Project Manager or Designate.

The Consultant must call the MDOT Region or TSC Traffic and Safety Engineer before beginning work to inform him or her of surveying activity in the area. The MDOT Region or TSC must be notified at least two weeks prior to lane closures so advance notice can be posted on the Web site.

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction*, 2003 edition, <a href="www.mdot.state.mi.us/specbook/">www.mdot.state.mi.us/specbook/</a>, and Supplemental Specification 03SS001(2) Errata to the 2003 Standard Specifications and all other supplemental specifications currently in effect against the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard "maintaining traffic" typicals for any and all closures.

Typical MDOT traffic control diagrams are available on line at <a href="https://www.mdot.state.mi.us/tands/plans.cfm">www.mdot.state.mi.us/tands/plans.cfm</a>

#### COORDINATION WITH OTHER CONTRACTS IN THE VICINITY

The Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Consultant.

The Consultant must contact the Development Engineer at the nearest MDOT TSC for information regarding project coordination.

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.07 of the 2003 Standard Specifications for Construction. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete work unit scheduled.

#### POST SURVEY CLEAN-UP

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

FINAL REPORT: DELIVERABLES

The final report for this project shall include:

- 1. In the first pocket of the portfolio, and first directory on the CD, labeled **ADMINISTRATIVE**, the following will appear:
  - a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
  - b. The project's Professional Surveyor's Report on company letterhead consisting of:
    - i) A comprehensive synopsis of the work performed on this project, signed **and sealed** by the project's Professional Surveyor.
    - ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
    - iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
  - c. CD or DVD with all documents scanned or converted into PDF files. Each page must be inserted in a master PDF file and bookmarked for easy retrieval. An example can be provided upon request.
  - d. MDOT QA/QC Portfolio Checklist (revised March 2009).
- 2. In the second pocket of the portfolio, and second directory on the CD, labeled **ALIGNMENT**, the following will appear:
  - a. An annotated MicroStation drawing of the alignment(s), showing:
    - i) A statement defining the alignment(s) as survey, as constructed, and/or legal
    - ii) Stationing, source of stationing, and station equation to existing stationing
    - iii) Horizontal coordinates of P.I.'s, at a minimum
    - iv) Curve data
    - v) Alignment points found or set
    - vi) Control points
    - vii) Reference lines and angles of crossing (if appropriate)
    - viii) Government corners and ties to government lines
  - b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. Witness lists must use only uppercase letters.
  - c. LCRC's for legal alignment points found or set.
- 3. In the third pocket of the portfolio, and third directory on the CD, labeled **CONTROL**, the following will appear:
  - a. Documentation of horizontal and vertical datum sources.
  - b. OPUS documentation, long version..
  - c. Least squares adjustments for the horizontal and vertical control.
  - d. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
  - e. Text files which contain the witness lists for the horizontal alignment ties, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof. Witness lists must use only uppercase letters.

- f. An MDOT-formatted Microsoft Word file, SurveyInfoSheet.doc, showing the data in e. above, using only upper case letters.
- 4. In the fourth pocket of the portfolio, and fourth directory on the CD, labeled **PROPERTY**, the following will appear:
  - a. Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired, or if riparian ownerships are required.
  - b. Maps, plats, and recorded surveys.
  - c. Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
  - d. Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.
- 5. In the fifth pocket of the portfolio, and fifth directory on the CD, labeled **MAPPING**, the following will appear:
  - a. Mapping file in MDOT MicroStation V8 format, and also converted to .PDF format. All point and line descriptions must use only upper case letters.
  - b. An archived CAiCE software file.
  - c. Geopak files produced from CAiCE.
  - d. All field survey notes and electronic mapping data used for the project. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
  - e. All supporting and supplemental information or data, such as drainage and utilities, electronically only if possible.
- 6. In the sixth pocket of the portfolio, and sixth directory on the CD, labeled **MISCELLANEOUS**, the following will appear:
  - a. Any photographs taken for clarity of an area
  - b. Any newspaper clippings related to the project
  - c. Any information not covered in this scope that will be of benefit to the designer or another surveyor